

VZCZCXRO3795

RR RUEHAG RUEHAST RUEHDA RUEHDBU RUEHDF RUEHFL RUEHIK RUEHKW RUEHLA
RUEHLN RUEHLZ RUEHROV RUEHSR RUEHVK RUEHYG
DE RUEHSI #3399/01 3601308
ZNR UUUUU ZZH
R 261308Z DEC 06
FM AMEMBASSY TBILISI
TO RUEHC/SECSTATE WASHDC 4980
INFO RUEHZL/EUROPEAN POLITICAL COLLECTIVE
RHEBAAA/DEPT OF ENERGY WASHDC
RUCPDOG/DEPT OF COMMERCE WASHDC
RUEAIIA/CIA WASHDC

UNCLAS SECTION 01 OF 03 TBILISI 003399

SIPDIS

SIPDIS

STATE FOR EUR/CARC AND EB/ESC/IEC
COMMERCE FOR 4231 DANICA STARKS

E.O. 12958: N/A

TAGS: [ENRG](#) [PREL](#) [GG](#)

SUBJECT: NO SHAH DENIZ GAS MEANS TOUGH CHOICES FOR GEORGIA

REF: BAKU 1840

1. Summary: BP reported the delay in availability of Shah Deniz gas to the Embassy on December 21. ACG associated gas, which is now being re-injected to support oil production, could supply up to 8.1 million cubic meters (cm) per day to Azerbaijan and Georgia. However, the old pipeline from Azerbaijan to Georgia can only handle 3.3 million cm per day, without upgrading. How much the Shah Deniz pipeline could supply depends on the capacity of a small input at the Sangachal distribution center in Azerbaijan. Georgia (and Azerbaijan) could reduce their dependence on natural gas by using mazut, or heavy fuel oil, in electricity generation. We estimate that using mazut in the three generating units at Gardabani that can do so would cut Georgia's daily gas needs by 3.4 million cm. The GOG estimates that mazut is more costly than the \$235 per thousand cubic meter price of Russian gas, but they would be very interested in finding cheaper supplies (possibly from Iraq) to burn at Gardabani. Transport from Iraq could be difficult since there are no direct rail connections from Turkey to Georgia.

2, On December 21, Embassy and USAID energy officers met with Hugh McDowell, General Manager for BP's office in Tbilisi. McDowell explained the problems reported reftel with the annulus at the Shah Deniz I gas well, which he said will delay BP's ability to supply gas from the Shah Deniz field to Georgia and Azerbaijan until "mid-February to mid-March". He expects the other two Shah Deniz gas wells to come on line in the second quarter of 2007. McDowell had informed Georgian PM Noghaidei of the serious delay in gas supply from Shah Deniz. This was important, he said, because Gazprom had given Azerbaijan and Georgia until 3 pm on December 22 to tell Gazprom how much gas the two governments intend to buy from it in 2007. He added that in his understanding, Gazprom is pressing this deadline in order to settle its plans for distribution of gas domestically in Russia and to Europe.

3. Given the unavailability of Shah Deniz gas to meet Georgia's winter demand this year, the conversation turned to the "associated" gas, which is produced by the ACG oil wells operated by BP and is normally used to maintain pressure to lift oil from the wells. McDowell recalled BP's promise to supply as much of this gas to Azerbaijan as Azerbaijan can take, with the intention to help Georgia meet its needs. According to McDowell, the ACG field can provide 1.1 million cubic meters (cm) per day to Azerbaijan at an offshore oil production facility known as "Oily Rocks". From there, Azerbaijan can feed the gas into the Azerbaijani gas distribution system. Another pipe carries ACG gas to the Sangachal distribution center near Baku. There, a limited amount of it is fed into the Shah Deniz pipeline, and the

rest is fed into the Azerbaijani system. The maximum possible amount of this gas McDowell estimated at 8 million cm/day. McDowell did not know how much gas can be fed into the Shah Deniz pipeline, but the amount is limited by the size of the intake at Sangachal.

¶4. Therefore, absent any gas from the Shah Deniz fields, the amount of gas that could be available to Georgia from Azerbaijan is the amount of ACG gas which can be fed into the Shah Deniz pipeline, as yet unknown, plus the gas from the Azerbaijani system which enters Georgia through one older pipeline. That older pipeline has a capacity of 3.3 million cm/day, and possibly, with repairs allowing higher pressure, 4-5 million cm/day. One potential problem McDowell pointed out is that gas may not be able to be transported from Eastern Georgia to Tbilisi and Western Georgia due to the design of the distribution system, separating the country into "islands".

¶5. On December 20, the Embassy's Energy Officer visited Gardabani, where all of Georgia's thermal generating capacity is located. Four units operate there: a combined cycle gas turbine (CCGT) owned by Energy Invest, with investment from Russia's Vneshtorgbank, two older units (numbers 3 and 4) owned by the state in the form of the state-owned company Tbilresi, and unit 9, owned by Russia's RAO-UES, operating as Mtkvari Energy. The CCGT cannot run on mazut (Heavy Fuel Oil), only gas or diesel fuel. Units 3, 4 and 9 can run on mazut or on a mazut/gas mixture. There is storage for 40,000 tons of mazut owned by Tbilresi, which is now empty. Another 160,000 tons of storage exists but is not operational. RAO-UES has no storage capacity, and also lacks the heating capacity needed to make the mazut flow into the burners. However, since units 3,4, and 9 were all part of the same complex at one time, connections exist which could allow unit

TBILISI 00003399 002 OF 003

9 to burn mazut if storage and heating tasks were shared by Tbilresi. Information on these units in tabular form follows:

Unit	Size	Daily Gas Consumption	Daily Mazut Consumption
CCGT	110 MW	742,000	Can't run on Mazut
		630 tons diesel (USAID estimate)	
Unit 3	130 MW	1 million cm	1000 tons
Unit 4	130 MW	1 million cm	1000 tons
Unit 9	250 MW	1.4 million cm	1560 tons

These figures are as reported by the operators we met at Gardabani.

¶6. The Energy Invest CCGT turbine is now built to run on only one cycle. With an additional investment of \$50 million, the exhaust gases from the turbines could be trapped and used to heat water for steam, turning additional turbines and generating an additional 40MW of electricity for the same input of gas or diesel. The President of Energy Invest, Geno Malazonia, said that he was not negotiating with Gazprom for supplies but was waiting for the outcome of the Georgia-Turkey-Azerbaijan negotiations on Shah Deniz (now virtually a moot issue).

¶7. Tbilresi is in bankruptcy, but still operating under a workout arrangement. Mazut has not been burned in units 3 and 4 for more than six or seven years, we were told by its manager, Valeri Lomtadze. A rail link to units 3 and 4 for delivery of mazut is not operational but is expected to be working by December 27. Tbilresi also controls two more non-working units at Gardabani, numbers 7 and 8. If they were refurbished, the Tbilresi manager said, they could produce a total of 750 megawatts. Fixing unit 8 alone would cost 7-8 million. In the last two years, \$15 million was spent on units 3 and 4 to repair and upgrade them. Units 3 and 4 work only from October to March.

¶8. RAO-UES's executive director was in Moscow, talking to Gazprom, when we visited. Therefore, we talked to Nodar Zakaidze, chief engineer. Like units 3 and 4, unit 9 operates from September to April. Zakaidze was concerned that if the cost of gas is significantly higher, the GOG energy regulator will have to permit RAO to raise the price of electricity to its customers.

¶9. On December 22 we met with Archil Mamatlashvili, Deputy Minister of Energy. Mamatlashvili said that Minister Gilauri was returning from Turkey early on the morning of December 23. He understood that a deal on Shah Deniz gas has been reached between Turkey and Georgia, but did not know any of the details. He agreed to facilitate a meeting with Gilauri on December 23. Mamatlashvili said that Georgia has activated its agreements on electricity with Azerbaijan and Turkey and is now receiving 68 MW from Azerbaijan and 82 MW from Turkey. The Turkish power is being used in Adjara. He expects that even more can be purchased from Azerbaijan in return for electricity to be furnished to Azerbaijan from Georgia in the summer.

¶10. Like other Georgian officials, including PM Noghaideli, Mamatlashvili was concerned that the cost of using mazut in the Gardabani thermal generators is prohibitively expensive. However, we informed him that a possibility exists of sourcing low-cost mazut from Iraq. Mamatlashvili was eager to explore this prospect. We compared USAID figures on the relative cost of mazut and natural gas and found that our calculations coincided well with Mamatlashvili's. If mazut were available at \$180 per ton, as some reports indicate might be the cost of Iraqi mazut, we agreed that transport costs would have to exceed \$110 per ton before mazut would be more expensive to use than \$220 per mcm natural gas. We also informed Mamatlashvili of the existence of the Exogenous Shocks Facility at the IMF, and gave him the contact information for the local IMF office to explore whether such financing might be available, or even needed.

¶11. Mamatlashvili did give us one unwelcome piece of news. He said that to his knowledge, there are no existing rail links from Turkey into Georgia, a legacy of the poor relations of the Soviet Union with Turkey. (Hence the Kars/Akhalkalkhi/Baku rail project now being organized.) Shipment of large quantities of mazut from Iraq might have to go to Ceyhan (Mediterranean) or Samsun (Black Sea), be put on ships and transported to Batumi, offloaded and then shipped by rail to Gardabani. With only 40,000 metric tons of

TBILISI 00003399 003 OF 003

storage in Batumi, frequent deliveries of mazut would be required.

¶12. Comment: The maximum conceivable use of mazut could reduce Georgia's usual 8 million cm per day gas demand by up to 3.4 million cm, to 4.6 million cm. Gas received in kind from transit of gas to Armenia (0.7 mcm/day) and the 3.3 mcm/day the pipeline from Azerbaijan, could be augmented by amounts of gas already in the Shah Deniz pipeline. BP's McDowell estimated that by reducing the pressure in the pipeline from 90 bar to 40 bar, about 1 mcm/day could be supplied for up to 40 days. The small input at Sangachal could possibly extend the viability of this route for gas in an unknown amount and number of days. These amounts would just barely cover Georgia's gas needs, as reduced by mazut use. Variations in demand could be handled at the expense of industrial customers like Azoti and Sakcementi.
MXPERRY